

EPA United States Environmental Protection Agency Washington, DC 20460 Work Assignment						Work Assignment Number 1-05				
						<input type="checkbox"/> Other <input type="checkbox"/> Amendment Number:				
Contract Number EP-D-11-006			Contract Period 04/29/2011 To 03/28/2012 Base <input checked="" type="checkbox"/> Option Period Number			Title of Work Assignment/SF Site Name ICI Boiler Control Measures				
Contractor EASTERN RESEARCH GROUP, INC.					Specify Section and paragraph of Contract SOW Partk I. 9					
Purpose: <input checked="" type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval						Period of Performance From 04/29/2011 To 03/28/2012				
Comments: This work assignment includes 150 hours for preparation of the work plan and to begin work on the work assignment. To the best of my knowledge, this work does not duplicate any work previously performed or currently being performed by this office.										
<input type="checkbox"/> Superfund Accounting and Appropriations Data <input checked="" type="checkbox"/> Non-Superfund										
Note: To report additional accounting and appropriations data use EPA Form 1900-69A.										
SFO (Max 2) <input type="checkbox"/>										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										
Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:				LOE: 0				
04/29/2011 To 03/28/2012										
This Action:						150				
Total:						150				
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee:		LOE:				
Cumulative Approved:				Cost/Fee:		LOE:				
Work Assignment Manager Name David Misenheimer						Branch/Mail Code:				
_____ (Signature) (Date)						Phone Number 919-541-5473				
						FAX Number:				
Project Officer Name Margaret Dougherty						Branch/Mail Code:				
_____ (Signature) (Date)						Phone Number: 919-541-2344				
						FAX Number:				
Other Agency Official Name						Branch/Mail Code:				
_____ (Signature) (Date)						Phone Number:				
						FAX Number:				
Contracting Official Name Rodney-Daryl Jones						Branch/Mail Code:				
_____ (Signature) (Date)						Phone Number: 919-541-3112				
						FAX Number:				

Statement of Work

I. Title: Support for ICI Boiler Control Measures

Contractor Name: ERG

Contract #: EP-D-11-006

WA #: 1-05

II. Work Assignment Manager (WAM):

WAM Name: David Misenheimer

U.S. Environmental Protection Agency

OAQPS

HEID (C439-02)

Research Triangle Park, NC 27711

Phone: (919) 541-5473

Alt. WAM Name: Robin Langdon

U.S. Environmental Protection Agency

OAQPS

HEID (C439-02)

Research Triangle Park, NC 27711

Phone: (919) 541-5695

III. Background: When developing regulations, EPA uses control measure information to assess the effectiveness of various control options and to estimate the potential costs.

The purpose of this Work Assignment (WA) is to develop control efficiency, cost, and co-impact information on Industrial, Institutional, and Commercial (ICI) Boilers with a priority being the reduction of NO_x emissions but to include other pollutant emissions as resources allow. This information will be developed by control technology, fuel type, and boiler size.

IV. Description and Tasks:

Task #1: Work Plan

The Contractor shall develop a new work plan. The Contractor shall hold conference calls with the WAM on at least a biweekly basis after approval of the work plan to plan and review progress of this WA.

Task #2: Prepare ICI Boiler Control Measure Information

- The Contractor shall review recent cost and emissions impact information on ICI Boiler control measures, including but not limited to:

- November 2008 NESCAUM report (*Applicability and Feasibility of NOx, SO2, and PM Emissions Control Technologies for Industrial, Commercial, and Institutional (ICI) Boilers*)
- May 2010 OTC/LADCO report (*Evaluation of Control Options for Industrial, Commercial and Institutional (ICI) Boilers, Technical Support Document*)
- EPA/OAQPS/SPPD rule development documents
- Emission Reductions and Co-impacts - The Contractor shall use the results of the review to develop emissions reduction (or increase) values for criteria pollutants, HAPs, and GHGs for each control measure and source group combination.
- Cost/Ton values - The Contractor shall develop low, medium, and high cost/ton values specific to the various types of ICI Boilers (by fuel type, boiler design, boiler capacity range, or other appropriate boiler characteristics).
- Cost Equations - The Contractor shall develop cost equations wherever possible that use boiler characteristics information from the emission inventory where available and where the values are reasonable (boiler capacity, emissions, etc) and provide outputs of:
 - Capital cost
 - Operating and Maintenance cost
 - Total Annualized cost

The Contractor shall develop separate control and cost information for boilers with a control measure already in place where the existing control measure is being replaced by one that is more effective, and also for where a new control measure will operate along with the existing control measure.

Where possible, the Contractor shall provide Capital Recovery Factor, equipment life, and interest rate for each specific measure. See the document "Control Strategy Tool Cost Equations Document", to be provided by the WAM, for examples of existing control measure cost equations.

- SCCs - The Contractor shall identify the 2008 National Emissions Inventory (NEI) Source Category Codes (SCCs) to which each ICI Boiler control measure applies.
- The Contractor shall organize and format all control measure information prepared under this Work Assignment to populate EPA's Control Measures Database (CMDB), to be provided by the WAM. All fields in the CMDB shall be populated for these control measures, where possible and where appropriate.

Deliverables Under Task 2

- 2a Documentation of the methodology and inputs used to prepare the data, issues encountered, and resolution of issues

2b ICI Boiler control measure information in document format as well as formatted for input to the CMDB

V. QA Requirements:

To identify and eliminate errors introduced during data preparation, the Contractor shall perform quality control (QC) of the data prior to delivering data sets to the WAM. The Contractor shall include a statement in the final report that confirms that the data is appropriate for the intended use. Also, the Contractor shall identify in the final report the sources of the data, any existing QA information about the data (i.e., QA that was performed at the time the data were originally prepared), and the location of the QA information.

VI. Deliverables:

The Contractor shall adhere to the following schedule:

Task	Deliverable	Delivery Schedule
1	Work Plan with QAPP	20 days after effective date of WA
2	Document methodology & inputs	10 weeks after effective date of WA
3	Document results and dataset formatted for input to CMDB	14 weeks after effective date of WA

VII. Reporting Requirements:

The Contractor shall provide monthly progress reports in accordance with the terms of the contract. The Contractor shall submit work products in electronic as well as hard copy form. In addition, the Contractor shall deliver to the WAM each draft and final report in electronic format that is readable by windows-based word-processing (Microsoft Word 2003), graphics (Microsoft PowerPoint 2003), and spreadsheet (Excel 2003) programs. The Contractor shall also provide electronic copies of reports in PDF format. The Contractor shall provide the control measure data set in Access 2003 or Access 2007 format, whichever is most convenient for the Contractor.

EPA United States Environmental Protection Agency Washington, DC 20460 Work Assignment						Work Assignment Number 1-05				
						<input type="checkbox"/> Other <input checked="" type="checkbox"/> Amendment Number: 000001				
Contract Number EP-D-11-006			Contract Period 04/29/2011 To 03/28/2012 Base <input checked="" type="checkbox"/> Option Period Number			Title of Work Assignment/SF Site Name ICI Boiler Control Measures				
Contractor EASTERN RESEARCH GROUP, INC.					Specify Section and paragraph of Contract SOW					
Purpose: <input type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input checked="" type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval						Period of Performance From 04/29/2011 To 03/28/2012				
Comments: The work plan dated 09/02/11 has been reviewed and we concur with the labor mix, technical hours (240), ODCs, total estimated cost \$24,991 and completion date of 03/28/12. The Work Assignment Change provides an additional 90 LOE. This document is IAW the CMM 7.3.5.1 (D).										
<input type="checkbox"/> Superfund Accounting and Appropriations Data <input checked="" type="checkbox"/> Non-Superfund										
SFO <input type="checkbox"/> Note: To report additional accounting and appropriations date use EPA Form 1900-69A. (Max 2)										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										
Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:				LOE: 150				
04/29/2011 To 03/28/2012										
This Action:						90				
Total:						240				
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee:		LOE:				
Cumulative Approved:				Cost/Fee:		LOE:				
Work Assignment Manager Name David Misenheimer <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>						Branch/Mail Code: Phone Number 919-541-5473 FAX Number:				
Project Officer Name Margaret Dougherty <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>						Branch/Mail Code: Phone Number: 919-541-2344 FAX Number:				
Other Agency Official Name <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>						Branch/Mail Code: Phone Number: FAX Number:				
Contracting Official Name Rodney-Daryl Jones <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>						Branch/Mail Code: Phone Number: 919-541-3112 FAX Number:				